



Image AF \$2881

Attorney Docket # 5121-51

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Olaf SUCH et al.

Serial No.: 09/726,783

Filed: November 30, 2000

For: Grid for the absorption of x-rays

Examiner: Vanore, David A.
Group Art: 2881

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February 17, 2004
(Date of Deposit)

Alfred W. Froebrich

Name of applicant, assignee or Registered Representative

Alfred W. Froebrich
Signature

February 17, 2004
Date of Signature

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

SIR:

This is an appeal, pursuant to 37 C.F.R. §1.192(a) from the decision of the Examiner in the above-identified application, as set forth in the Final Office Action wherein the Examiner finally rejected appellant's claims. The rejected claims are reproduced in the Appendix A attached hereto. A Notice of Appeal was mailed on December 15, 2003. This Appeal Brief is being submitted in triplicate.

The fee of \$330.00 for filing an Appeal Brief pursuant to 37 C.F.R. §1.17(f) is submitted herewith. Any additional fees or charges in connection with this application may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

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REAL PARTY IN INTEREST

The assignee, U.S. Philips Corp., of applicants, Olaf Such, Josef Lauter, Stefan Schneider, and Herfried Wieczorek, is the real party of interest in the above-identified U.S. Patent Application.

RELATED APPEALS AND INTERFERENCES

There are no other appeals and/or interferences related to the above-identified application at the present time.

STATUS OF CLAIMS

The application was filed with claims 1-10. Each of the claims 1-10 was amended during examination by an Amendment dated June 27, 2003. All of the claims were finally rejected in an Office Action dated July 15, 2003. The final rejection of claim 1-10 is appealed herein.

STATUS OF AMENDMENTS

A Response to the Final Office Action was filed on November 17, 2003. The claims were not amended in the Response. In an Advisory Action dated December 23, 2003, the Examiner stated that the response was considered and that claims 1-10 remain rejected.

SUMMARY OF THE INVENTION

Appellants' invention is directed to a grid for the absorption of X-rays to filter out scattered radiation which are not usable in radiological examination. The grid includes a

plurality of layers. Each of the plural layers includes at least two wire elements, which are separate elements 10 that are arranged parallel to one another and spaced apart (see e.g., Fig 2, and page 5 line 30 to 32 of the specification). A plurality of layers are arranged one above the other such that a weave-like grid is obtained (page 2, lines 33-34). To produce the grid, the orientation of successive layers are arranged at an angle relative to one another, preferably rotated through a 90 degree angle (page 2, line 34 to page 3, line 1 and page 5, lines 3-6). Advantageously, the separate wire elements allow the grid to be easily made as described in the specification starting on page 4, line 26 to page 5, line 2.

ISSUES

1. Whether claims 1-10 are patentable under 35 U.S.C. §102(a) over U.S. Patent No. 5,814,235 (Pellegrino)?

GROUPING OF CLAIMS

The pending claims are 1-10, of which claims 1 and 10 are independent. The claims are grouped as follows:

Group I -- claims 1-10, which stand or fall together.

ARGUMENT

GROUP I (CLAIMS 1-10)

For a prior art reference to anticipate a claim, each and every element as set forth in the claim must be found, either expressly or inherently described, in the prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed.

Cir. 1987). Independent claims 1 and 10 each specifically recite a grid which includes a plurality of layers and "at least one of the plurality of layers comprising at least two wire elements that are separate from each other and are spaced apart in the at least one of the plurality of layers".

Pellegrino discloses a grid for absorbing scattered secondary radiation. In contrast to the present invention, each layer of Pellegrino is made from a metallic foil sheet, wherein aligned portions of the sheet are removed by chemical milling or photo-etching to open air cell portions of each sheet (see col. 4, lines 47-52 of Pellegrino). The fact that the remaining portions of the foil sheet define a grid does not mean that they wire elements. Rather, a wire element is a thread or slender rod. The layers in Pellegrino each comprise a foil sheet with a pattern of holes. Accordingly, the remaining portions of the foil sheet can not be construed to comprise at least two wire elements as recited in independent claims 1 and 10.

The Examiner's rationale for rejecting independent claims 1 and 10 is that Pellegrino discloses a grid for absorbing x-rays having a plurality of wire elements as recited in independent claim 1. The Examiner refers to Fig. 1, item 31. However, Applicants respectfully submit that the metallic foil sheet having portions removed to form a grid, as disclosed by Pellegrino, fails to disclose at least two wire elements as recited in claims 1 and 10 in the present application.

In the Final Office Action, the Examiner's response to the Applicants' argument states that "Applicant argues that the art of Pellegrino et al. is not applicable because the wire layers of Pellegrino et al. are not separate from one another". However, this does not correctly reflect what Applicants tried to argue. The argument presented by applicants states that the wire elements within the at least one of the plurality of layers are separate from each other, as specifically recited in independent claim 1 and 10. Since Pellegrino fails to teach or suggest that the layers are made of

separate wire elements, it is respectfully submitted that Pellegrino fails to disclose "at least one of the plurality of layers comprising at least two wire elements that are separate from each other and are spaced apart in the at least one of the plurality of layers", as recited in independent claim 1.

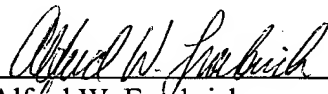
Furthermore, since Pellegrino teaches that each layer is made by removing portions of a metallic foil sheet, Pellegrino also fails to teach or suggest a layers including wire elements.

For the foregoing reasons, it is respectfully submitted that the combined teachings of fail to anticipate, or establish a *prima facie* case of obviousness with regard to, the subject matter recited in independent claims 1 and 10. The Final Rejection of the claims in Group I should be reversed.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that appellant's appellants' claims are not rendered obvious anticipated by and are, therefore, patentable over the art of record, and the Examiner's rejections should be reversed.

Respectfully submitted,
COHEN, PONTANI, LIEBERMAN & PAVANE

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Dated: February 17, 2004

APPENDIX

1. (previously presented) A grid for the absorption of X-rays comprising: a plurality of layers, at least one of the plurality of layers comprising at least two wire elements that are separate from each other and are spaced apart in the at least one of the plurality of layers.
2. (previously presented) A grid as in claim 1, wherein the at least two wire elements in said each one of the plurality of layers are arranged so as to extend parallel to one another.
3. (previously presented) A grid as in claim 1, wherein the at least two wire elements of a first one of the plurality of layers and a wire element of a second one of the other plurality of layers are arranged so as to extend at right angles to one another.
4. (previously presented) A grid as in claim 1, wherein the at least two wire elements comprise one of a round and a polygonal cross-sections.
5. (previously presented) A grid as in claim 1, wherein an adjacent pair of wire elements of the at least two wire elements in the at least one of the plurality of layers are spaced apart by a distance which differs from a distance between a different pair of the at least two wire elements in one of the at least one of the plurality of layers and another one of the plurality of layers.

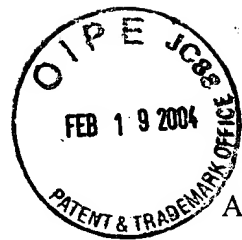
6. (previously presented) A grid as in claim 1, wherein the at least two wire elements of a plurality of successive layers of the plurality of layers are oriented in one direction.

7. (previously presented) A grid as in claim 1, wherein the plurality of layers is focused onto a focus.

8. (previously presented) A grid as in claim 1, wherein the at least two wire elements comprise one of a material which can absorb X-rays and a coating of material which can absorb X-rays.

9. (previously presented) A grid as in claim 1, wherein the plurality of layers is provided with an X-ray transparent auxiliary substance in order to secure the at least two wire elements.

10. (previously presented) An X-ray examination apparatus comprising:
an X-ray detector; and
a grid for the absorption of X-rays arranged in front of the X-ray detector, the grid comprising a plurality of layers, at least one of the plurality of layers comprising a plurality of wire elements that are separate from each other and are spaced apart in the at least one of the plurality of layers.



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an X-ray detector; and
a grid for the absorption of X-rays arranged in front of the X-ray detector, the grid comprising a plurality of layers, at least one of the plurality of layers comprising a plurality of wire elements that are separate from each other and are spaced apart in the at least one of the plurality of layers.